# ABSTRACT OF THE INVENTION

What is disclosed is a system and method to improve the black and white image quality of tag-based color imaging systems in a color image path by making use of the additional two channels available. The present method exploits the resources of the two un-utilized channels during black and white

5    processing. The single channel black-and white image is replicated into all three channels at the output of the storage memory. Segmentation tags are fed into each channel to control the image processing. Additional filters, TRCs and rendering methods will be available due to processing in all the 3 channels. Resources may additionally include such things as: filters, TRC mapping, and

10   halftoning modules. The video output from the output image processing is merged back based on the segmentation tags. Different de-screen filters with various cut-off frequencies and enhancement filters are applied to the image based on pixel classification. One example of such an application is to use different cut-off frequency filters for text-on-tint pixels and different halftone

15   frequency pixels. The number of TRCs and halftone screens available per page has also increased by 3 times. The method also applies to any image path that has extra channels available for certain scanning/copying modes.